

IN THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A method of integrating vocal input recognition and handwriting input recognition comprising ~~the steps of:~~
receiving a ~~syllabic~~ vocal signal representing an object ~~alphanumeric-symbol~~ logogram;
recognizing the input ~~syllabic~~ vocal signal and generating an ~~alphanumeric-symbol~~ a logogram array having a plurality of candidate ~~alphanumeric-symbols~~ logograms corresponding to the object ~~alphanumeric-symbol~~ logogram;
displaying the ~~plurality of candidate alphanumeric-symbols~~ logogram array;
receiving an input handwriting signal representing a feature portion of the object ~~alphanumeric-symbol~~ logogram; and
extracting a most coincidental candidate ~~alphanumeric-symbol~~ logogram from the ~~plurality of candidate alphanumeric-symbols~~ array of logograms corresponding to the feature portion.
2. (Currently Amended) The method of claim 1 wherein the handwriting signal is a substructure of the object ~~alphanumeric-symbol~~ logogram.
3. (Currently Amended) The method of claim 2 wherein the substructure of the object ~~alphanumeric-symbol~~ logogram is the radical of the object ~~alphanumeric-symbol~~ logogram.
4. (Currently Amended) The method of claim 1, further comprising displaying most frequently utilized candidate ~~alphanumeric-symbols~~ logograms of the ~~alphanumeric-symbol~~ logogram array before receiving the input handwriting signal.
5. (Currently Amended) The method of claim 4, further comprising replacing the most frequently utilized candidate ~~alphanumeric-symbols~~ logograms with the most coincidental candidate ~~alphanumeric-symbol~~ logogram of the ~~alphanumeric-symbol~~ logogram array.

6. (Currently Amended) A method of integrating vocal input recognition and handwriting input recognition comprising the steps of:

- receiving a first input representing an object ~~alphanumeric-symbol~~ logogram;
- generating an ~~alphanumeric-symbol~~ logogram array having a plurality of candidate ~~alphanumeric-symbols~~ logograms corresponding to the first input;
- displaying the ~~plurality of candidate alphanumeric-symbols~~ logogram array;
- detecting if there exists a second input resenting a feature portion of the object ~~alphanumeric-symbol~~ logogram during a predetermined time span; and
- if there exists the second input, then extracting a most coincidental candidate ~~alphanumeric-symbol~~ logogram from the plurality of candidate ~~alphanumeric-symbols~~ logogram based on the feature portion represented by the second input,

wherein the first input is one of a vocal input and a handwriting input, and the second input is the other of the vocal input and the handwriting input.

7. (Previously Presented) The method of claim 6 further comprising receiving the first input and then converting the first input into a first signal and receiving the second input and then converting the second input into a second signal.

8. (Previously Presented) The method of claim 6 further comprising extracting a feature portion of the first input from the first signal; and extracting the feature portion of the second input from the second signal.

9. (Currently Amended) The method of claim 6 further comprising extracting a most frequently utilized candidate ~~alphanumeric-symbol~~ logogram from the ~~alphanumeric-symbol~~ logogram array where the second input does not exist.

10. (Currently Amended) The method of claim 9 further comprising displaying the most frequently utilized candidate ~~alphanumeric-symbol~~ logogram.

11. (Currently Amended) The method of claim 6 further comprises displaying a candidate ~~alphanumeric-symbol~~ logogram in accordance with the ~~alphanumeric-symbol~~ logogram.

12. (Currently Amended) A recognition system integrating vocal and handwriting input recognition comprising:

a vocal input device for receiving a vocal input representing an object ~~alphanumeric symbol~~ logogram and converting the vocal input into a first signal;

a handwriting input device for receiving a handwriting input representing a ~~feature portion~~ of the object ~~alphanumeric symbol~~ logogram and convert the handwriting input into a second input;

a vocal similarity estimator for generating an ~~alphanumeric symbol~~ logogram array having a plurality of candidate ~~alphanumeric symbols~~ logograms corresponding to the object ~~alphanumeric symbol~~ logogram according to the first signal;

a display for displaying the plurality of candidate ~~alphanumeric symbols~~ logograms; and

a handwriting similarity estimator for extracting a most coincidental candidate ~~alphanumeric symbol~~ logogram from the plurality of candidate ~~alphanumeric symbols~~ logograms.

13. (Currently Amended) The recognition system of claim 12 wherein the ~~feature portion~~ of the object ~~alphanumeric symbol~~ logogram is a radical of the object ~~alphanumeric symbol~~ logogram.

14. (Currently Amended) The recognition system of claim 12 further comprising a vocal database storing a plurality of vocal patterns, the vocal patterns being provided for the vocal similarity estimator to map with the first signal and to generate the ~~alphanumeric symbol~~ logogram array.

15. (Previously Presented) The recognition system of claim 12 further comprising a vocal ~~feature~~ portion extractor for extracting the characteristic of the vocal input from the first signal and transmitting the characteristic to the vocal similarity estimator.

16. (Currently Amended) The recognition system of clam 12 further comprising a handwriting database storing a plurality ~~[[o]]~~ of handwriting patterns, the handwriting patterns being provided for the handwriting similarity estimator to map with the second signal and to extract the most coincidental candidate ~~alphanumeric symbol~~ logogram.

17. (Currently Amended) A recognition system comprising:

- a first input device for receiving a vocal input representing a ~~alphanumeric symbol~~ logogram and converting the vocal input into a first signal;
- a second input device for receiving a handwriting input representing a ~~feature portion~~ of the object ~~alphanumeric symbol~~ logogram and converting the handwriting input into a second signal;
- a first similarity estimator for generating an ~~alphanumeric symbol~~ logogram array having a plurality of candidate ~~alphanumeric symbols~~ logograms corresponding to the object ~~alphanumeric symbol~~ logogram by the first signal;
- a display for displaying the ~~plurality of candidate alphanumeric symbols~~ logogram array, wherein the ~~plurality of candidate alphanumeric symbols~~ logograms in the logogram array are displayed in an order according to individual frequent usage rates of the plurality of candidate ~~alphanumeric symbols~~ logograms;
- a second similarity estimator for extracting a most coincidental candidate ~~alphanumeric symbol~~ logogram from the ~~alphanumeric symbol~~ logogram array according to the second signal.

18. (Currently Amended) The recognition system of claim 17 further comprising a vocal database for storing a plurality of vocal patterns, and a handwriting database for storing a plurality of handwriting patterns; one of the vocal database and the handwriting database is provided for the first similarity estimator to map with the first signal and to generate the ~~alphanumeric symbol~~ logogram array, the other of the vocal database and the handwriting database is provided for the second similarity estimator to map with the second signal and to extract the most coincidental candidate ~~alphanumeric symbol~~ logogram.

19. (Previously Presented) The recognition system of claim 17 further comprising a first ~~feature portion~~ extractor and a second ~~feature portion~~ extractor, the first ~~feature portion~~ extractor extracting a ~~feature portion~~ of the first input from the first signal and transmitting the ~~feature portion~~ of the first input to the first similarity estimator, the second ~~feature portion~~ extractor extracting the ~~feature portion~~ of the second input from the second signal and transmitting the ~~feature portion~~ of the second input to the second similarity estimator.

20. (Currently Amended) A computer accessible recording medium comprising a plurality of programming codes for executing the following step:

receiving a ~~syllable~~ input vocal signal representing an object ~~alphanumeric-symbol~~ logogram;

recognizing the input vocal signal and generating an ~~alphanumeric-symbol~~ a logogram array having a plurality of candidate ~~alphanumeric-symbols~~ logograms corresponding to the object ~~alphanumeric-symbol~~ logograms;

displaying the plurality of candidate ~~alphanumeric-symbols~~ logograms;

receiving an input handwriting signal representing a ~~feature~~ portion of the object ~~alphanumeric-symbol~~ logogram;

extracting a most coincidental candidate ~~alphanumeric-symbol~~ logogram from the ~~alphanumeric-symbol~~ logogram array corresponding to the ~~feature~~ portion of the object ~~alphanumeric-symbol~~ logogram.